

**Notice of Allowability**

Application No.

10/826,286

Examiner

Gregory R. Del Cotto

Applicant(s)

LEE ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amend. filed 12/21/04.
2. ☒ The allowed claim(s) is/are 20-23, 27-31, 33-37, 41-51 renumbered 1-25.
3. ☒ The drawings filed on 4/19/04 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 3/3/05.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Christopher Hayden on 3/3/05.

The application has been amended as follows:

#### **The Claims:**

In claim 20, line 1, delete "etching and resist material" and insert – resist and etching residue --.

In claim 20, line 2, delete "multi-level" and insert – wafer --.

In claim 20, line 3, delete the text beginning with "(a) forming..." and ending with "...and" in line 6.

In claim 20, line 7, delete "(d)".

In claim 20, line 8, delete "pattern".

In claim 20, line 25, after "of" insert – a chelating agent which is --.

In claim 23, line 1, delete "an alkyl" and insert – a C1-C6 straight, branched or cyclo alkyl --.

In claim 30, line 1, delete "26" and insert – 21 --.

In claim 31, line 1, delete "28" and insert – 27 --.

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In claim 35, line 1, delete "etching and resist material" and insert – resist and etching residue --.

In claim 35, line 2, delete "multi-level" and insert – wafer --.

In claim 35, line 3, delete the text beginning with "(a) forming..." and ending with "...and" in line 6.

In claim 35, line 7, delete "(d)".

In claim 35, line 8, delete "pattern".

In claim 35, line 20, after "water" insert -- ; and --.

In claim 35, line 38, delete "; and (d) water".

In claim 44, line 1, delete "further comprising ashing the resist and etching residue after the step of etching" and insert – wherein said cleaning composition is used to remove resist and etching residue which has been plasma ashed --.

In claim 48, line 1, delete "etching and resist material" and insert – resist and etching residue --.

In claim 48, line 2, delete "multi-level" and insert – wafer --.

In claim 48, line 3, delete the text beginning with "(a) forming..." and ending with "...and" in line 6.

In claim 48, line 7, delete "(d)".

In claim 48, line 8, delete "pattern".

In claim 48, line 20, after "water" insert -- ; and --.

In claim 50, line 2, delete "an alkyl" and insert – a C1-C6 straight, branched or cyclo alkyl --.

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance:

Note that, Applicant's amendments, Applicant's arguments, the Examiner's Amendment, and the terminal disclaimer are sufficient to place the instant claims in condition for allowance. The Examiner asserts that all claim limitations are supported back to 08/078657, filed June 21, 1993. Additionally, note that the amendment submitted 4/19/04 which cancels claims 1-22, 24-26, and 40-63 and adds new claims 64-91 was not entered as a whole since claims which were intended to be canceled did not exist.

Of the references of record, the most pertinent is Nemes (GB 2,157,670) teaches a composition containing a hydroxylamine compound, a quinone, a dihydroxybenzene, a diaminobenzene, or an aminohydroxybenzene compound, and a neutralizing amine. The is an excellent composition for preventing corrosion in boiler water systems and other aqueous systems. However, Nemes does not teach a method for removing resist and etching residue from a wafer substrate as recited by the instant claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (571)

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272-1312. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Gregory R. Del Cotto  
Primary Examiner  
Art Unit 1751

GRD  
March 3, 2005